

### The Definitive PDF/A Conformance Checker Version 0.6, 30/10/2015

# veraPDF Desktop Graphical User Interface

Quick Start Guide

### Introduction

The veraPDF Consortium provides the implementation of the Definitive PDF/A Conformance Checker.

The veraPDF Conformance Checker is implemented using the veraPDF Library. The veraPDF Library is the software library that provides the functionality and APIs for PDF/A Validation, Policy Checking, Metadata Fixing, and Reporting.

The veraPDF Desktop Graphical User Interface (GUI) is the executable program that provides access to the veraPDF API and Library on a desktop computer or workstation.

This Quick Start Guide explains the basic concepts of veraPDF Conformance Checker and helps you to get started with veraPDF Desktop GUI.

#### Glossary

**Human-readable Report**: a HTML report generated from a Machine-readable Report in a format suitable for human interpretation.

**Machine-readable Report**: a structured XML report, independent of language and localization, generated for automated processing rather than human readability.

**Metadata Fixer**: the component which allows for simple fixes of the metadata embedded in the file, making them compliant with the standard specification.

**PDF Document**: a binary file claiming conformance with ISO 32000-1:2008 (for PDF/A-2 and PDF/A-3) or to the Adobe specification of PDF 1.4 (for PDF/A-1).

**PDF Document Metadata**: PDF Document-level metadata stream containing the XMP package and the entries of the PDF Info dictionary.

**PDF Feature**: any property of the PDF Document or any of its structural elements such as pages, images, fonts, color spaces, annotations, attachments, etc.

**PDF Features Report:** a Machine-readable Report containing the description of the PDF Features extracted from a PDF Document.

**PDF/A Flavor**: PDF/A Part+Level. Possible PDF/A Flavors are: 1a, 1b, 2a, 2b, 2u, 3a, 3b, 3u.

PDF/A Level: Level a, b, or u conformance as defined by the PDF/A Part.

**PDF/A Part**: Part 1: ISO 19005-1:2005; Part 2: ISO 19005-2:2011; Part 3: ISO 19005-3:2012.

**PDF/A Validation**: the process of testing whether the PDF Features of a PDF Document conform to the requirements for a particular PDF/A Flavor. The PDF/A Validation process generates a PDF/A Validation Report.

**PDF/A Validation Report**: a Machine-readable Report containing the results (all errors and notifications) of PDF/A Validation.

**Validation Profile**: a structured file describing the set of validation tests to be performed during PDF/A Validation for a particular PDF/A Flavor.

## The veraPDF Desktop GUI overview

The veraPDF Desktop GUI provides the convenient access to the features of veraPDF PDF/A Conformance Checker. It allows configuring input parameters of PDF/A Validation (PDF Document, Validation Profile, validation settings), performing actual validation and checking the resulting Machine-readable and Human-readable Reports.

#### Installing veraPDF Desktop GUI

The veraPDF Desktop GUI is Java application that is distributed as a single jar file that is the application installer. The installer includes the application binary files and supplementary resource files: Validation Model description, test PDF Documents and Validation Profiles.

Installation of the application is basically copying the data from the installer package to the local computer. It consists of the several steps. At the beginning of the installation it is possible to specify the installation folder:

00	IzPack - Installation of	veraPDF Software	
Select the installation path	:		
/Applications/veraPDF			🕒 Browse
(Made with IzPack - http://izpac	k.org/)		
	Step 2 of 5	Previous	Next 🔯 Quit

On the next step it is possible to define which components of the veraPDF Desktop GUI are installed:

00	IzPack - Installation of	veraPDF Software	
Select the packs you want Note: Grayed packs are req	to install: uired.		
🗹 veraPDF GUI			9,9 MB
veraPDF Mac and *nix	Scripts		2,78 KB
veraPDF Corpus and V	Validation model		6,05 MB
Description veraPDF GUI.			
Total space required:			15,95 MB
Available space:			139,89 GB
(Made with IzPack - http://izpac	k.org/)		
	Step 3 of 5	Previous 🖗 Next	🔇 Quit

When all the selected components are installed it is possible to generate uninstallation script that allows removing the application later on:

00	IzPack – Installation of veraPDF Software
	Installation has completed successfully.
	An uninstaller program has been created in:
	/Applications/veraPDF/Uninstaller
	Generate an automatic installation script
(Made with IzPack - http://izpac	:k.org/)
	Step 5 of 5

After installation is completed the test PDF Documents can be found in the 'corpus' subfolder of the application installation folder, the Validation Model description files are located in 'model' subfolder, and the Validation Profiles are in 'profiles' subfolder.

The implementation of the veraPDF Library, Desktop GUI and other relevant software components are located in 'bin' subfolder.

#### Using veraPDF Desktop GUI

The application installation folder contains the script that shall be executed to launch veraPDF Desktop GUI application. The script name depends on the platform:

- on Mac OSX and Unix systems: verapdf-gui
- on Windows systems: *verapdf-gui.bat*

When the application is started the following user interface is displayed:

00	P	DF/A Conformance Checker		
Settings A	About			
vera <mark>PDF</mark>	Please spe	ecify input PDF, Validation P	rofile and pr	ess "Validate"
PDF file not choser	n			Choose PDF
rofiles/veraPDF-va	alidation-prof	iles-integration/PDF_A/PDF	A-1B.xml	Choose Profile
				Validate
Generate reports:	Validation & I	Features 💠 🗌 Fix metae	data	
<pre>Keport </pre> <b>XML</b> :	> (	Save XML		View XML
<html< th=""><td>&gt;</td><td>Save HTML</td><td>V</td><td>iew HTML</td></html<>	>	Save HTML	V	iew HTML

The main controls of the user interface are described in the table below:

Control	Description
'Choose PDF' button	Used to specify the input PDF Document
'Choose Profile' button	Used to specify the input Validation Profile
'Validate' button	Starts validating the specified PDF Document for the conformance to the requirements of the specified Validation Profile Becomes enabled when both PDF Document and Validation Profile are specified
'Generate reports' dropdown list	<ul> <li>Specifies the types of the Machine-readable Reports included into the resulting Report. Available options: <ul> <li>Validation - only PDF/A Validation Report is included into the resulting Report</li> <li>Features - only PDF Features Report is included into the resulting Report</li> <li>Validation &amp; Features - (default option) both PDF/A Validation Report and PDF Features Report are included into the resulting Report</li> </ul> </li> </ul>

'Fix metadata' checkbox	Specifies if the PDF Document Metadata shall be automatically fixed by Metadata Fixer in order to make it compliant with the standard specification
'Save XML' button	Used to save the resulting Machine-readable Report in XML format Becomes enabled after the validation is completed
'Save HTML' button	Used to save the resulting Human-readable Validation Report in HTML format Becomes enabled after the validation is completed
'View XML' button	Opens the resulting Machine-readable Report in default XML viewer application Becomes enabled after the validation is completed
'View HTML' button	Opens the resulting Human-readable Validation Report in default HTML viewer application Becomes enabled after the validation is completed

The Machine-readable XML Report may consist of PDF/A Validation Report and PDF Features Report. However Human-readable HTML Report includes only PDF/A Validation information.

000		PDF/A Conformance Checker	
Settings	About		
vera <mark>PD</mark>	Please s	pecify input PDF, Validation Pro	ofile and press "Validate"
/veraPDF/veraP	DF test suite 6-	1-4-t01-fail-b.pdf	Choose PDF
/veraPDF/PDFA	–1B.xml		Choose Profile
			Validate
Generate reports	✓ Validation & Validation Features	& Features 👘 🗌 Fix metada	ıta
<xi\< td=""><td>/L&gt;</td><td>Save XML</td><td>View XML</td></xi\<>	/L>	Save XML	View XML
<hti< td=""><td>ML&gt;</td><td>Save HTML</td><td>View HTML</td></hti<>	ML>	Save HTML	View HTML

When the required input parameters (PDF Document and Validation Profile) are specified the 'Validate' button becomes enabled.

The main window allows specifying the basic settings of the validation process: the type of the data included into the resulting Machine-readable Report and if automatic metadata fixing is enabled.

The additional 'Settings' panel provides access to the advanced settings:

OOO PDF/A Cor	nformance Checker
About	
VeraPDF Please specify input	at PDF, Validation Profile and press "Validate"
00	Settings
Include passed rules:	
Stop checking rule after failed checks:	100
Display failed checks for rule:	100
Save fixed files with prefix:	veraPDF_
Save fixed files into the folder:	/veraPDF/Fixed Files Choose
Ok	Cancel

The advanced settings are described in the table below:

Setting	Description
Include passed rules	If checked the passed validation rules are included into the resulting PDF/A Validation Report in addition to the failed rules This setting is unchecked by default to reduce the size of the resulting Report
Stop checking rule after failed checks	Specifies the maximum number of failed checks to be performed for each rule from the Validation Profile During validation when the specified value is reached the rule is not checked anymore to reduce the validation time

Display failed checks for rule	Specifies the maximum number of failed checks to be reported for each rule from the Validation Profile The specified value is used as the limit for the number of failed checks that shall be included into the resulting Report to reduce the size of the Report
Save fixed files with prefix	Specifies the prefix that is added to the name of the original PDF document when saving it after automatic metadata fixing was performed This setting is relevant only when 'Fix metadata' option is enabled
Save fixed files into the folder	Specifies the output folder for saving the PDF Documents after automatic metadata fixing was performed This setting is relevant only when 'Fix metadata' option is enabled

A Validation Profile describes the tests that shall be performed during the validation. These tests are represented by rules that define a certain restrictions on the PDF Document features. When validation is performed the restrictions from the rules are checked for the relevant objects from PDF Document. A check may either fail or pass. In case of large Documents the number of passed and failed checks may be big so the settings described above allow reducing the number of redundant checks and thus optimizing validation time and the size of resulting Report.

When all the required settings are specified the validation may be started by pressing the 'Validate' button. During the processing the progress bar is displayed. After the validation is finished the resulting statement is shown like in the example image below:

000		PDF/A Conformance Checker		
Settings	About			
VeraPDF Please specify input PDF, Validation Profile and press "Validate"				
/veraPDF/veraP	DF test suite 6-	1-4-t01-fail-b.pdf		Choose PDF
/veraPDF/PDFA	–1B.xml			Choose Profile
PDF file is r	PDF file is not compliant with Validation Profile requirements Validate			
Generate reports: Validation & Features 💠 🗌 Fix metadata				
Report				
<xi\< td=""><td>/IL&gt;</td><td>Save XML</td><td></td><td>View XML</td></xi\<>	/IL>	Save XML		View XML
<hti< td=""><td>ML&gt;</td><td>Save HTML</td><td></td><td>View HTML</td></hti<>	ML>	Save HTML		View HTML

It is possible to save or view the resulting Machine-readable or Human-readable Reports by pressing the corresponding button.